

**REMARKS**

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1-4 and 6-20 are now present in this application. Claims 1 and 13 are independent. By this Amendment, claims 1 and 6 are amended and claim 5 is canceled. No new matter is involved.

Reconsideration of this application is respectfully requested.

**Rejection Under 35 U.S.C. § 103**

Claims 1, 5 and 6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 3,049,021 to Neyhouse et al. ("Neyhouse") in view of U.S. Patent 2,255,200 to Wahl and U.S. Patent 5,669,095 to Dausch et al. ("Dausch") and EP 0949374 to Koshiga et al. ("Koshiga"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Because the rejection is based on 35 U.S.C. § 103, what is in issue in such a rejection is "the invention as a whole", not just a few features of the claimed invention. Under 35 U.S.C. § 103, "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under section 103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the

invention was made. See In re O'Farrell, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the Examiner must explain what the differences between the claimed invention and the prior art are and provide objective factual evidence to support a conclusion that it would be obvious to one of ordinary skill in the art to achieve the claimed invention, which includes those missing features.

In the second place, in rejecting claims under 35 U.S.C. §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A showing of a suggestion, teaching, or motivation to combine the prior art references is an “essential evidentiary component of an obviousness holding.” C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not “evidence.” See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, a factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Neyhouse discloses a circa 1959 clothes washing machine that uses an electric motor 46, which operates at 1725 r.p.m, and employs a two-speed transmission 48 to achieve a top tub rotation dehydration speed of 431 r.p.m (col. 7, lines 55-57) and a washing tub rotation speed of approximately 43 r.p.m. (col. 10, lines 10-14). The tub is driven by a belt drive. Clearly, neither of these two tub rotation rates is the same as the motor rotation rate.

The Office Action then turns to Wahl, which teaches a transmission for a circa 1940 washing machine, which employs an axial motor drive, and in which the driven shaft is driven at one speed that matches the speed of the motor, e.g., 300 r.p.m., and at a second speed of about 60 r.p.m. (paragraph bridging pages 2 and 3).

The Office Action asserts that it would be obvious to modify Neyhouse with a conventional two speed washing machine transmission to achieve the expected result.

Applicants respectfully disagree for a number of reasons.

Firstly, the Neyhouse already has a two speed transmission that apparently works properly in 1959 and the Office Action fails to provide any objective factual evidence that one of ordinary skill in the art would be motivated to replace Neyhouse's circa 1959 two speed transmission, which is clearly mated with Neyhouse's electric motor that spins at 1725 r.p.m. with a conventional circa 1940 two speed transmission of Wahl, which is clearly matched with a motor that operates at a far different rotation speed, i.e., approximately 300 r.p.m., than the 1725 r.p.m. speed of Neyhouse.

Secondly, the Office Action does not explain how Wahl's two speed transmission would work properly in Neyhouse's washing machine when substituting the Wahl type of two speed transmission would transmit Neyhouse's motor rotation speed of 1720 r.p.m. to Neyhouse's tub, and operate the washer at a speed far in excess of Neyhouse's 431 r.p.m, which would probably wreck the washer and the drive train. In this regard, it is noted that to establish a *prima facie* case of obviousness, one must show "some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." In re Fine, 837 F.2d at 1074, 5 USPQ2d at 1598. There is no suggestion to combine, however, if a reference teaches away from its combination with another source. *See id.* at 1075, 5 USPQ2d at 1599. "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant . . . [or] if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant." In re

Gurley, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994). If when combined, the references "would produce a seemingly inoperative device," then they teach away from their combination. In re Sponnoble, 405 F.2d 578, 587, 160 USPQ 237, 244 (CCPA 1969); *see also* In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (finding no suggestion to modify a prior art device where the modification would render the device inoperable for its intended purpose).

The Office Action then turns to Dausch, which discloses a washing machine with an agitator 130, which is a feature that is not found in Neyhouse, the base reference. Dausch discloses nothing about the rotation speed of its motor in either the washing operation or in the dehydration operation. Yet the Office Action concludes that it would be obvious to modify the Neyhouse-Wahl reference combination to use an AC induction motor because of the general statement in Dausch that AC induction motors are commonly used in household appliances because they are simple, reliable, robust and effectively provide motive power for various functions of the machine.

Applicants respectfully submit that even if one of ordinary skill in the art were properly motivated to use an AC induction motor in the Neyhouse-Wahl reference combination, the so modified version of Neyhouse-Wahl would not render the claimed invention obvious because of the aforementioned shortcomings of the Neyhouse-Wahl reference combination.

The Office Action then turns to Koshiga, which discloses a washer with a drive motor in which the air gap S is located at the outer circumferential side of rotor 45a (see paragraph [0025] of Koshiga). Koshiga does not disclose the operating rotation speed of its motor or any of the speed changing effect of its transmission. The Office Action concludes that it would be obvious to modify the aforementioned Neyhouse-Wahl-Dausch reference combination to provide a motor with an air gap as claimed to achieve an effective rotor-stator arrangement.

Applicants respectfully disagree for a number of reasons, one of which is that Neyhouse, the base reference, uses a belt drive to rotate its tub whereas Koshiga does not, but uses a direct drive, and fails to disclose the operating speeds of the motor, which have not been shown to match those of Neyhouse or any of the other references.

Moreover, even if one of ordinary skill in the art were properly motivated to modify the Neyhouse-Wahl-Dausch reference combination, as suggested, this so modified version of the Neyhouse-Wahl-Dausch reference combination would still not render obvious the claimed invention because Koshiga's gap S is located on the outside circumferential side of its rotor 45a, whereas the claim recites that the gap is located on the outside circumferential side of the stator, which is just the opposite of what is claimed.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the claimed invention.

#### **Allowed and Allowable Subject Matter**

Applicants acknowledge with appreciation, the allowance of claims 13-20. The Office Action indicates that claims 2-4 and 7-12 would be allowable if rewritten in independent form. Applicants thank the Examiner for the indication of allowable subject matter in claims 2-4 and 7-12 and respectfully submit that claim 1, from which claims 2-4 and 7-12 depend, is allowable for reasons discussed above. Because of this, applicants have not re-written the claims 2-4 and 7-13 in independent form.

**CONCLUSION**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Reply is respectfully requested.

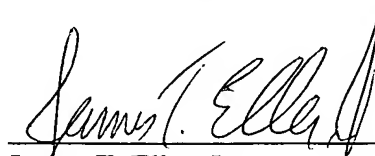
If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

**Date: January 14, 2008**

Respectfully submitted,

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